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Environmental Management Los Alamos Field Office P.O. Box 1663, MS M984 Los Alamos, New Mexico 87545 (505) 665-5658/FAX (505) 606-2132

Date: OCT 1 1 2018

Refer To: N3B-18-0267

Esteban Herrera, Chief Water Enforcement Branch (6EN-WS) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202-2733

Subject: NPDES Permit No. NM0030759 - Analytical Results for Site Monitoring Areas

PT-SMA-4.2 and CHQ-SMA-1.03 from the First Measurable Storm Event

Following Certification of Enhanced Control Measures

Dear Mr. Herrera:

This letter and enclosures are being submitted in accordance with the requirements of the U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759 for discharges of storm water at Los Alamos National Laboratory. The permit was issued to Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy, effective November 1, 2010, and on April 30, 2018, responsibilities, coverage, and liability transferred from LANS to Newport Nuclear News BWXT – Los Alamos, LLC (N3B). As specified in Part I, Section E.l(c),

Permittees shall certify completion of installation of control measures under this subsection to EPA within 30 days of completion of all such measures at the Site and, where applicable shall provide sampling results within 30 days of receipt of analytical results from the first measurable storm event after completion of such measures....

Accordingly, the analytical results from samples collected during the first measurable storm event received at two site monitoring areas (PT-SMA-4.2 and CHQ-SMA-1.03) in the last 30 days are enclosed. The reports provide references to the certificates of completion of the installation of the control measures. Table 1 includes information about the confirmation samples collected at the site monitoring areas. The enclosed certified documents can also be accessed at the following website: https://eprr.lanl.gov.

Table 1 Confirmation Samples Collected at PT-SMA-4.2 and CHQ-SMA-1.03 from the First Measurable Storm Event after Certification of Installation of Enhanced Controls

					Sample	Final
		Site	,	Permitted	Collection	Validation
Watershed	Priority	Number	SMA Number	Feature	Date	Date
Water/	Moderate	36-004(d)	PT-SMA-4.2	I007	8/10/2018	9/11/2018
Cañon de Valle						
Ancho/	Moderate	33-012(a)	CHQ-SMA-1.03	Q002B	8/10/2018	9/17/2018
Chaquehui		33-017				
-		C-33-001				
		C-33-003				
		33-008(c)				

If you have any questions, please contact Steve Veenis at (505) 309-1362 (steve.veenis@em-la.doe.gov) or David Rhodes at (505) 665-5325 (david.rhodes@em.doe.gov).

Sincerely,

Frazer Locknart Program Manager

Regulatory and Stakeholder Interface

N3B – Los Alamos

Sincerely,

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Environmental Management
Los Alamos Field Office

FL/DR/SV

Enclosure(s): One hard copy with electronic files –

- 1. Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at PT-SMA-4.2 (EM2018-0062)
- 2. Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CHQ-SMA-1.03 (EM2018-0061)

Cy: (letter with enclosure[s])

Sarah Holcomb, NMED-SWQB

Cy: (letter and enclosure[s] emailed)
Robert Houston, EPA Region 6
Brent Larsen, EPA Region 6
Laurie King, EPA Region 6
Steve Yanicak, NMED-DOE-OB
David Rhodes, DOE-EM-LA
David Nickless, DOE-EM-LA

Nick Lombardo, N3B Joe Legare, N3B Frazer Lockhart, N3B Bruce Robinson, N3B Emily Day, N3B Steve Veenis, N3B Karen Velarde-Lashley, N3B Don Carlson, N3B Amanda White, N3B emla.docs@em.doe.gov N3B Records

Public Reading Room (EPRR)

PRS Database

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Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at PT-SMA-4.2

October 11, 2018

NPDES PERMIT NO. NM0030759 EM2018-0062

PF: 1007 PT-SMA-4.2 Site: 36-004(d)

The following certification of analytical results received from the confirmation monitoring samples collected after the completion of the installation of enhanced controls was performed in accordance with NPDES Permit No. NM0030759, Part I.E.1.

CERTIFICATION STATEMENT OF AUTHORIZATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Frazer Lockhart, Program Manager Regulatory and Stakeholder Interface

Newport News Nuclear BWXT - Los Alamos, LLC

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Environmental Management Los Alamos Field Office Date

PF: I007 PT-SMA-4.2 Site: 36-004(d)

Table 1 presents the analytical results received from confirmation monitoring samples collected from the first measurable storm event following the installation and subsequent certification of enhanced controls at site monitoring area PT-SMA-4.2. Final analytical results were received and validated on September 11, 2018. The descriptions and photographs of each enhanced control installed at PT-SMA-4.2 were provided to the U.S. Environmental Protection Agency on October 30, 2015 (ESHID-600980/LA-UR-15-27921). Table 2 presents each applicable target action level (TAL) for the analytes monitored.

Table 1
Radiochemical Analytical Results from the First Measurable Storm Event
Collected on August 10, 2018, Following Installation of Enhanced Controls at PT-SMA-4.2

Sample ID	Analyte	Field Preparation	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifier ^a	Data Validation Date
WT_IPC-18-154588	Radium-226 and radium-228	Unfiltered	Detect	3.84	0.13	n/a ^b	0.645	NQ	9/11/2018
WT_IPC-18-154588	Gross alpha	Unfiltered	Detect	84.5	5.6	7.28	4.07	NQ	9/11/2018

Note: TAL exceedance ratio is the analytical result divided by the applicable average TAL (ATAL).

^a NQ = Result is not qualified.

^b n/a = Not applicable.

PF: I007 PT-SMA-4.2 Site: 36-004(d)

Table 2 Applicable TALs

Analyte	Field Preparation	Unit	CAS No.	MQL	ATAL	MTAL
Radium-226 and radium-228	Unfiltered	pCi/L	n/a*	n/a	30	n/a
Gross alpha	Unfiltered	pCi/L	n/a	n/a	15	n/a

Notes: CAS = Chemical Abstracts Service; MQL = minimum quantification level; ATAL = average TAL; MTAL = maximum TAL. As allowed by Part I.D. of the Individual Permit, analytical results are compared with either the corresponding MTAL/ATAL (as applicable) or the MQL, whichever value is greater, for the purpose of determining the effectiveness of storm water control measures.

^{*}n/a = Not applicable.

Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CHQ-SMA-1.03

October 11, 2018

NPDES PERMIT NO. NM0030759 EM2018-0061

CHQ-SMA-1.03 PF: Q002B Sites: 33-012(a)

33-017

C-33-001 C-33-003

33-008(c)

The following certification of analytical results received from the confirmation monitoring samples collected after the completion of the installation of enhanced controls was performed in accordance with NPDES Permit No. NM0030759, Part I.E.1.

CERTIFICATION STATEMENT OF AUTHORIZATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Frazer Lockhart, Program Manager Regulatory and Stakeholder Interface

Newport News Nuclear BWXT - Los Alamos, LLC

Date

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Environmental Management

Los Alamos Field Office

PF: Q002B CHQ-SMA-1.03 Sites: 33-012(a)

33-017

C-33-001

C-33-003 33-008(c)

Tables 1 and 2 present the analytical results received from confirmation monitoring samples collected from the first measurable storm event following the installation and subsequent certification of enhanced controls at site monitoring area CHQ-SMA-1.03. Final analytical results were received and validated on September 17, 2018. The descriptions and photographs of each enhanced control installed at CHQ-SMA-1.03 were provided to the U.S. Environmental Protection Agency on May 30, 2014 (ERID-256723/LA-UR-14-22995). Table 3 presents each applicable target action level (TAL) for the analytes monitored.

Table 1
Radiochemical Analytical Results from the First Measurable Storm Event
Collected on August 10, 2018, Following the Installation of Enhanced Controls at CHQ-SMA-1.03

Sample ID	Analyte	Field Preparation	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifier ^a	Data Validation Date
WT_IPC-18-154614	Radium-226 and radium-228	Unfiltered	Detect	2.85	0.095	1.73	n/a ^b	NQ	9/17/2018
WT_IPC-18-154614	Gross alpha	Unfiltered	Detect	16.2	1.1	2.32	1.27	U	9/17/2018

Notes: TAL exceedance ratio is the result divided by the smallest applicable TAL. Applicable TALs are the larger of the maximum TAL (MTAL) and minimum quantification level (MQL) or the larger of the average TAL (ATAL) or MQL.

^a NQ = Result is not qualified; U = result is not detected.

b n/a = Not applicable.

PF: Q002B CHQ-SMA-1.03 Sites: 33-012(a)

33-017

C-33-001 C-33-003

33-008(c)

Table 2
Metals, Inorganic, and Organic Analytical Results from the First Measurable Storm Event
Collected on August 10, 2018, Following the Installation of Enhanced Controls at CHQ-SMA-1.03

Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Report Method Detection Limit (µg/L)	Report Quantitation Limit (µg/L)	Validation Qualifier ^a	Notification of Data Validation Date
WT_IPC-18-154513	Aluminum	Filtered	Detect	130	0.17	19.3	50	NQ	9/17/2018
WT_IPC-18-154513	Antimony	Filtered	Detect	1.01	0.0016	1	3	J	9/17/2018
WT_IPC-18-154513	Arsenic	Filtered	Nondetect	2	0.22	2	5	U	9/17/2018
WT_IPC-18-154513	Boron	Filtered	Detect	16.5	0.0033	15	50	J	9/17/2018
WT_IPC-18-154513	Cadmium	Filtered	Nondetect	0.3	0.3	0.3	1	U	9/17/2018
WT_IPC-18-154513	Chromium	Filtered	Nondetect	3	0.014	3	10	U	9/17/2018
WT_IPC-18-154513	Cobalt	Filtered	Nondetect	1	0.001	1	5	U	9/17/2018
WT_IPC-18-154513	Copper	Filtered	Detect	4.6	1.1	0.3	1	NQ	9/17/2018
WT_IPC-18-154513	Lead	Filtered	Nondetect	0.5	0.029	0.5	2	U	9/17/2018
WT_IPC-18-154614	Mercury	Unfiltered	Nondetect	0.067	0.087	0.067	0.2	U	9/17/2018
WT_IPC-18-154513	Nickel	Filtered	Detect	1.67	0.0098	0.6	2	J	9/17/2018
WT_IPC-18-154614	Selenium	Unfiltered	Nondetect	2	0.4	2	5	U	9/17/2018
WT_IPC-18-154513	Silver	Filtered	Nondetect	0.3	0.6	0.3	1	U	9/17/2018
WT_IPC-18-154513	Thallium	Filtered	Nondetect	0.6	0.095	0.6	2	U	9/17/2018
WT_IPC-18-154513	Vanadium	Filtered	Detect	1.3	0.013	1	5	J	9/17/2018

PF: Q002B CHQ-SMA-1.03 Sites: 33-012(a)

33-017

C-33-001 C-33-003

33-008(c)

Table 2 (continued)

Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Report Method Detection Limit (µg/L)	Report Quantitation Limit (µg/L)	Validation Qualifier ^a	Notification of Data Validation Date
WT_IPC-18-154513	Zinc	Filtered	Detect	5.21	0.12	3.3	10	J	9/17/2018
WT_IPC-18-154614	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	0.17	1.67	5	U	9/17/2018
WT_IPC-18-154614	Total PCBb	Unfiltered	Detect	0.000863	1.3	n/a ^c	n/a	NQ	9/17/2018

Notes: TAL exceedance ratio is the result divided by the smallest applicable TAL. Applicable TALs are the larger of the maximum TAL (MTAL) and minimum quantification level (MQL) or the larger of the average TAL (ATAL) or MQL.

^a NQ = Result is not qualified; J = result is estimated; U = result is not detected.

^b PCB = Polychlorinated biphenyl.

^c n/a = Not applicable.

PF: Q002B CHQ-SMA-1.03 Sites: 33-012(a)

33-017

C-33-001 C-33-003

33-008(c)

Table 3 Applicable TALs

Analyte	Field Preparation	Unit	CAS No.	MQL	ATAL	MTAL
Radium-226 and radium-228	Unfiltered	pCi/L	n/a ^a	n/a	30	n/a
Gross alpha	Unfiltered	pCi/L	n/a	n/a	15	n/a
Aluminum	Filtered	μg/L	7429-90-5	2.5	n/a	750
Antimony	Filtered	μg/L	7440-36-0	60	640	n/a
Arsenic	Filtered	μg/L	7440-38-2	0.5	9	340
Boron	Filtered	μg/L	7440-42-8	100	5000	n/a
Cadmium	Filtered	μg/L	7440-43-9	1	n/a	0.6
Chromium	Filtered	μg/L	7440-47-3	10	n/a	210
Cobalt	Filtered	μg/L	7440-48-4	50	1000	n/a
Copper	Filtered	μg/L	7440-50-8	0.5	n/a	4.3
Lead	Filtered	μg/L	7439-92-1	0.5	n/a	17
Mercury	Unfiltered	μg/L	7439-97-6	0.005	0.77	1.4
Nickel	Filtered	μg/L	7440-02-0	0.5	n/a	170
Selenium	Unfiltered	μg/L	7782-49-2	5	5	20
Silver	Filtered	μg/L	7440-22-4	0.5	n/a	0.4
Thallium	Filtered	μg/L	7440-28-0	0.5	6.3	n/a
Vanadium	Filtered	μg/L	7440-62-2	50	100	n/a
Zinc	Filtered	μg/L	7440-66-6	20	n/a	42
Cyanide, weak acid dissociable	Unfiltered	μg/L	57-12-5	10	5.2	22
Total PCBs ^b	Unfiltered	μg/L	1336-36-3	n/a	0.00064	n/a

Notes: CAS = Chemical Abstracts Service; MQL = minimum quantification level; ATAL = average TAL; MTAL = maximum TAL. As allowed by Part I.D. of the Individual Permit, analytical results are compared with either the corresponding MTAL/ATAL (as applicable) or the MQL, whichever value is greater, for the purpose of determining the effectiveness of storm water control measures.

a n/a = Not applicable.

^b PCB = Polychlorinated biphenyl.